30

98/M 206 WO

We claim:

	\	
5	amino acid sequence shown under s (b) a nucleic acid molecule comprising	consisting of a protein comprising the Seq ID No. 3, the nucleotide sequence
10	shown under Seq ID No. 2 or ribonucleotide sequence correspond (c) a nucleic acid molecule which hybrid molecule mentioned under (a) or thereto, and	ling hereto; idizes with a nucleic acid
15	(d) a nucleic acid molecule whose nucl from the sequence of a nucleic a	acid molecule mentioned legeneracy of the genetic
	homology of over 90% with Seq ID No. 2.	
20	2. A nucleic acid molecule as claimed in c molecule.	claim 1, which is a DNA
	3. A DNA molecule as claimed in claim 2, whi	ch is a cDNA molecule.
25	5 4. A nucleic acid molecule as claimed in one containing regulatory elements.	e or more of claims 1 to 3

- 5. A nucleic acid molecule as claimed in claim 1, which is an RNA molecule.
- 6. A nucleic acid molecule which specifically hybridizes with a nucleic acid molecule as claimed in any of claims 1 to 5 and has a homology of over 90% with Seq ID No. 2.
- 35 7. A nucleic acid molecule as claimed in claim 6 which, is an oligonucleotide with a length of at least 15 nucleotides.

AMENDED SHEET

- 8. A vector containing a DNA molecule as claimed in any of claims 1 to 5.
- A vector as claimed in claim 8, wherein said nucleic acid molecule is
 linked in sense orientation to regulatory elements which ensure transcription and synthesis of a translatable RNA in pro- or eukaryotic cells.
- 10. A vector as claimed in claim 8, wherein said nucleic acid molecule is linked in sense orientation to regulatory elements which ensure the synthesis of an untranslatable RNA in pro- or eukaryotic cells.
 - 11. A vector as claimed in claim 8, wherein said nucleic acid molecule is linked in antisense orientation to regulatory elements which ensure the synthesis of an untranslatable RNA in pro- or eukaryotic cells.
 - 12. A host cell which is transformed with a nucleic acid molecule as claimed in one or more of claims 1 to 5 or a vector as claimed in one or more of claims 8 to 11 or which is derived from such a cell.

20,4 ,3 1.1.1 14.

15

A process for the preparation of a protein as claimed in claim 13, wherein a host cell as claimed in claim 12 is cultured under conditions which permit said protein to be synthesized and said protein is isolated from the cultured cells and/or the culture medium.

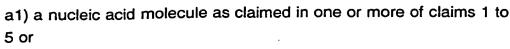
25 15.

30

35

A process for generating a transgenic plant cell, wherein

- a) a nucleic acid molecule as claimed in one or more of claims 1 to 5 or
- b) a vector as claimed in one or more of claims 8 to 11 is integrated into the genome of a plant cell.
- A transgenic plant cell which has been transformed with a nucleic acid molecule as claimed in one or more of claims 1 to 4 or one or more vector as claimed in claim 8 to 11 or which is derived from such a cell.
- 16 17. A process for generating a transgenic plant cell, wherein



a2) a vector as claimed in one or more of claims 8 to 11 is integrated into the genome of a plant cell and (b) an intact plant is regenerated from said plant cell.

18. A plant containing a plant cell as claimed in claim 16.

A plant as claimed in claim 18, which is a crop plant.

A plant as claimed in claim 19, which is a starch-storing plant.

21. A plant as claimed in claim 20, which is a monocotyledonous plant or maize

15 21 22. A plant as claimed in claim 21, which is a barley, rye or wheat plant.

23. A propagation material of a plant as claimed in one or more of claims 18 to 22.

The use of a plant cell as claimed in claim 16, a plant as claimed in one or more of claims 18 to 22 or of propagation material as claimed in claim 23 for the production of starch.

ADD AT